

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented)

A method for offshore pipeline laying, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed for making a connection at said second position to a subsea structure, and presenting a catenary length (L) between the seabed and the laying vessel, said method establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing a first seabed transponder on the pipelay route centerline at the second position;

installing a second seabed transponder on the pipelay route centerline spaced upstream from the first seabed transponder at a distance (D') greater than the catenary length (L) of the pipeline;

establishing the positions of the first and second seabed transponders so as to determine the exact distance separating said first and second seabed transponders;

attaching a first pipe transponder on the pipeline and laying the pipeline at the first position so that it will land close to the second seabed transponder;

interrogating the second seabed transponder and the first pipe transponder in a relative mode to establish the exact distance between them;

comparing the established distance with the distance separating the first and second seabed transponders to calculate the remaining length of pipeline required to reach the second position;

cutting the pipeline according to said remaining length;

welding the connector to the pipeline; and thereby

laying the pipeline to the second position with the connector being at the second position.

Claim 2 (Previously Presented)

The method of claim 1, wherein the distance (D') is comprised between ($L + 300\text{ft}$) and ($L + 700\text{ft}$).

Claim 3 (Previously Presented)

The method of claim 1, wherein a third seabed transponder is arranged on the pipelay route upstream from the second seabed transponder.

Claim 4 (Previously Presented)

The method of claim 3, wherein a second pipe transponder is attached to the pipeline upstream from the first pipe transponder.

Claim 5 (Original)

The method of claim 4, wherein the distance between the first and second pipe transponders is shorter than the distance between the second and third seabed transponders.

Claim 6 (Previously Presented)

The method of claim 4, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 7 (Previously Presented)

The method of claim 1, wherein another pipe transponder is attached to the pipeline to help the positioning of the connector at the second position.

Claim 8 (Original)

The method of claim 4, wherein said second and third seabed transponders are spaced about 500 feet apart.

Claim 9 (Original)

The method of claim 8, wherein said first and second pipeline transponders are spaced about 300 feet apart.

Claim 10 (Previously Presented)

The method of claim 9, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 11 (Previously Presented)

A method for offshore pipeline laying, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, said method establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

- installing first and second seabed transponders along the pipelay route, the first seabed transponder being near said second position;

- determining the distance separating said first and second seabed transponders;

- installing a pipe transponder on said pipeline;

- interrogating said second seabed transponder and said pipe transponder to determine the respective distance between them; and

- determining from said respective distance separating said second seabed transponder and said pipe transponder, the remaining length of pipeline needed to reach the second position.

Claim 12 (Previously Presented)

The method of claim 11, wherein the seabed transponders are arranged on the pipelay route centerline.

Claim 13 (Previously Presented)

The method of claim 11, further comprising the steps of:

- installing a third seabed transponder along the pipelay route;

installing a second pipe transponder on said pipeline near said first pipe transponder; and

interrogating said third seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.

Claim 14 (Previously Presented)

The method of claim 4, wherein a third pipe transponder is attached to the pipeline to help the positioning of the connector at the second position.

Claim 15 (Previously Presented)

A method for offshore pipeline laying, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, said method establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing a seabed transponder along the pipelay route;

installing a pipe transponder on said pipeline;

interrogating said seabed transponder and said pipe transponder to determine the respective distance between them; and

determining from said respective distance separating said seabed transponder and said pipe transponder, the remaining length of pipeline needed to reach the second position on the seabed.

Claim 16 (Previously Presented)

The method of claim 15, wherein the seabed transponder is arranged on the pipelay route centerline.

Claim 17 (Previously Presented)

The method of claim 15, further comprising the steps of:

installing another seabed transponder along the pipelay route;

installing a second pipe transponder on said pipeline near said first pipe transponder; and

interrogating said other seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.

Claim 18 (Currently Amended)

The method of claim 11, wherein ~~no more than one~~ exactly one pipe transponder is installed on said pipeline in ~~the installing said step of installing a pipe transponder.~~

Claim 19 (Currently Amended)

The method of claim 15, wherein ~~no more than one~~ exactly one pipe transponder is installed on said pipeline in ~~the installing said step of installing a pipe transponder.~~

Claim 20 (Currently Amended)

The method of claim 1, wherein ~~no more than one~~ exactly one pipe transponder is ~~installed attached~~ on said pipeline in ~~the installing said step of attaching a first pipe transponder.~~

Claim 21 (Currently Amended)

The method of claim 1, wherein ~~no more~~ exactly two seabed transponders ~~than are installed in said steps of installing said first and second seabed transponders are installed.~~

Claim 22 (Currently Amended)

The method of claim 3, ~~when no more~~ wherein exactly three seabed transponders ~~than are installed as said first, second and third seabed transponders are installed.~~

Claim 23 (Currently Amended)

The method of claim 11, wherein ~~no more~~ exactly two seabed transponders ~~than are installed in said step of installing~~ said first and second seabed transponders ~~are installed~~.

Claim 24 (Currently Amended)

The method of claim 13, ~~when no more~~ wherein exactly three seabed transponders ~~than are installed as~~ said first, second and third seabed transponders ~~are installed~~.

Claim 25 (Currently Amended)

The method of claim 15, wherein ~~no additional~~ exactly one seabed transponders ~~are~~ is installed in said step of installing a seabed transponder.

Claim 26 (Currently Amended)

The method of claim 17, wherein ~~no additional~~ exactly two seabed transponders are installed in said steps of installing a seabed transponder and installing another seabed transponder.